

Patent Claims

1. Injection molding device with an injection molding cylinder in which is arranged a coaxial worm that is rotatable and axially displaceable by drive devices, characterized in that a spindle nut (9) which is rotatable by a first drive device (15) is mounted in a housing (11), in that the spindle nut (9) cooperates with a screw sleeve (8) which is axially displaceable during rotation of the spindle nut (9), wherein a means for preventing rotation (12) is connected with the housing (11), in that a shaft (1) is mounted in the interior of the screw sleeve (8) and is connected at one end to the worm (16) and has at the other end an axial coupling (3), one of whose coupling parts communicates with a second drive device (7).

2. Injection molding device according to claim 1, characterized in that the drive device (15) provided for the axial displacement of the worm and the drive device (7) provided for rotation of the worm are electric motors.

3. Injection molding device according to claim 1, characterized in that the electric motors are servo motors which are excited by permanent magnets.

4. Injection molding device according to claim 1, characterized in that the axial coupling (3) has a serration.

5. Injection molding device according to claim 1, characterized in that the screw sleeve (8) is constructed as a ball roll spindle.